CS175-14

Rubber World

The technical service magazine for the rubber industry Volume 189, No. 4 January 1984

TECHNICAL SERVICE '84

Featuring:

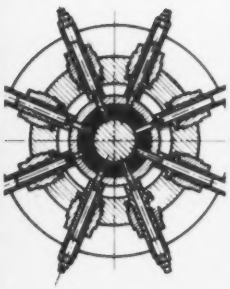
1st annual tech service survey

Roundtable discussion on tech service

Supplier & Independent lab directories

Rubber World

The technical service magazine for the rubber industry



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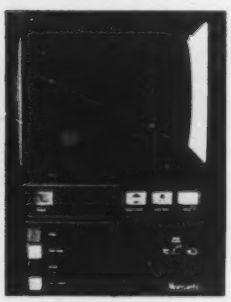

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The BASF Group, West Germany, reported sales for the first three quarters was $9.6 billion and pre-tax profits were $389 million.

Compo Industries reported fourth quarter revenues of $20.8 million and net income of $482,000. Revenues for the year were $87.8 million and net income was $282,000.

Dayco had fourth quarter sales of $217.1 million and net earnings of $6.5 million. Yearly figures were sales of $718.7 million and earnings of $4.3 million.

Exxon had a third quarter net income of $1.2 billion on revenues of $23.3 billion.

Jones & Vining reported net earnings for the third quarter were $224,000 on sales of $7.4 million.

Myers Industries had a third quarter net income of $902,020 on sales of $20.3 million.

Brad Ragan Inc reported second quarter earnings of $875,000 on revenues of $48.2 million.

Markets, news

Goodyear Tire and **Firestone Tire** both see continued improvement in tire sales for 1984, with Goodyear predicting slightly more units sold. Goodyear chairman Robert Mercer said "a slimmed down tire industry will have to push its capacity in 1984 to meet the expected total demand for 187 million auto tires, including 4 million exports." This would represent the largest requirement for tires in five years and would represent an increase of more than 2% above expected 1983 figures. Goodyear sees a 5% increase in original equipment tires to 47 million but only a slight increase in replacement tires from 135 million tires in 1983 to 136 million in 1984. Truck tire sales should increase by about 800,000 units as well. Firestone agrees with the replacement auto figures but predicts 48 million oe passenger tires will be sold.

U.S. consumption of adhesives and sealants will expand by 60%, climbing from 9 billion pounds to nearly 15 billion pounds in 1995 according to **Predicasts, Inc.** This demand increase will be coupled with a trend toward more expensive, high-performance adhesive and sealant formulations which will result in a four-fold jump in the market's dollar value from $6.5 billion in 1982 to $25 billion by 1985. Predicasts cites hot melts, acrylics, epoxies and polyesters as the formulations expected to demonstrate exceptional market gains.

A task force set up by the Malaysian government predicts the demand for natural rubber would rise to about 5 million tons in 1990 and to 6 million tons by the year 2000. The task force advocated that steps be initiated "without delay" to increase that country's natural rubber production primarily through efforts to raise production efficiency.

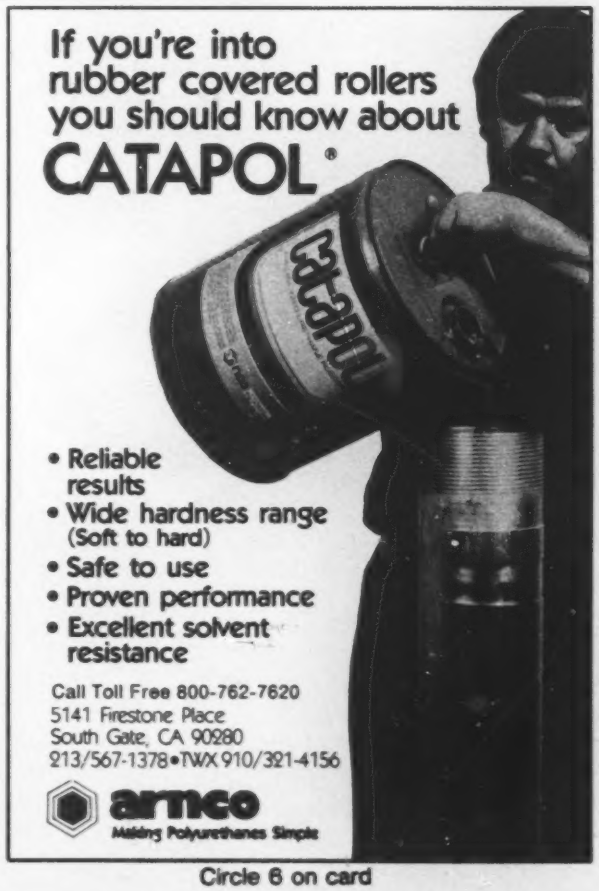
Production of lead free zinc oxide for the first nine months of 1983 was up 9% over the previous year with production at a little more than 98,000 metric tons.

In a joint statement by George Langstaff, president of Footwear Industries of America and two AFL-CIO unions the action by the Melville Corp./Thom McAn to halt almost all domestic shoe production they said "we are saddened, we are angry, and we are frustrated . . . but we are not surprised. Today's closing was announced on the same day that the government released figures showing that shoe imports surged 62% in October as compared with October 1982. This is the highest monthly percentage increase in history. Melville's closings are a direct result of the unprecedented and uncontrolled flood of imported shoes into the U.S. market."

RMA monthly tire & tube shipments & production report through September 1983
(Figures in thousands of units)

	1983	1982	% Change
Passenger Tires			
Shipments			
Original Equipment	31,380	25,907	+21.13
Radial	26,190	21,692	+20.74
Replacement	103,034	99,937	+3.10
Radial	71,185	64,722	+9.99
Export	2,939	2,125	+38.31
Radial	1,990	1,140	+74.56
Total	137,353	127,969	+7.33
Radial	99,365	87,554	+13.49
Production	117,057	113,803	+2.86
Radial	81,722	77,517	+5.42
Ending Inventory	27,173	31,855	−14.70
Radial	20,397	24,203	−15.73
Truck & Bus Tires			
Shipments			
Original Equipment	3,881	3,637	+6.71
Radial	1,771	1,427	+24.11
Replacement	22,141	21,203	+4.42
Radial	7,229	6,140	+17.74
Export	765	730	+4.79
Radial	366	201	+82.09
Total	26,787	25,570	+4.76
Radial	9,366	7,768	+20.57
Production	22,513	21,759	+3.47
Radial	6,903	5,611	+23.03
Ending Inventory	5,681	6,830	−16.82
Radial	2,234	2,623	−14.83

General Tire announced that the remaining manufacturing operations at its Plant 1 facility in Akron, OH will



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RMA industry rubber report through August 1983
(figures are expressed in metric tons)

	Cumulative 1983	Cumulative 1982	% Change 83 vs 82
Total New Rubber			
New rubber available	1,830,856	1,806,768	1.33
Imports	550,542	516,125	6.67
Exports	205,761	223,343	−7.87
Apparent Consumption	1,622,330	1,636,507	−.87
Total Natural Rubber			
Imports	438,860	430,369	1.97
Exports	11,232	10,072	11.52
Apparent Consumption	432,115	453,705	−4.76
% Total new rubber	26.63	27.72	
Total Synthetic Rubber			
Production	1,280,314	1,290,643	−.80
Imports	111,682	85,756	30.23
Exports	194,529	213,271	−8.79
Apparent Consumption	1,190,214	1,182,802	.63
% Total new rubber	73.36	72.27	
Total SBR			
Production	587,138	602,009	−2.47
Imports	37,420	34,989	6.95
Exports	53,015	60,291	−12.07
Apparent Consumption	582,683	576,976	.99
Total Nitrile			
Production	35,048	32,969	6.31
Imports	6,068	5,243	15.74
Exports	4,193	4,293	−2.33
Apparent Consumption	36,600	35,190	4.01
Polybutadiene			
Production	209,998	197,607	6.27
Imports	27,890	19,979	39.60
Exports	10,196	9,386	8.63
Apparent Consumption	223,862	214,764	4.24
Ethylene-Propylene			
Production	111,138	89,379	24.34
Imports	380	176	115.91
Exports	20,343	19,937	2.04
Apparent Consumption	88,526	76,232	16.13
Butyl, Polyisoprene, Silicone and other Synthetic Elastomers			
Production	260,381	286,310	−9.06
Imports	37,401	24,431	53.09
Exports	76,151	85,329	−10.76
Apparent Consumption	205,656	231,601	−11.20

be discontinued. Tire production was halted at the facility in 1982 and since that time the plant has produced bladders for curing presses and tire machine parts. It is anticipated complete shutdown will take 12-18 months. The company also announced it will phase out its tire development workshop operations in Akron by the end of 1984. The operation is being moved to General's Mount Vernon, IL tire plant.

The **Lubrizol Corp.** announced it is closing its polybutene plant at Port Arthur, TX.

Sun Co. will close three lubricant manufacturing facilities at the Marcus Hook, PA refinery. In addition, Sun is in the process of divesting its European lube marketing operations. Sun said the closings will allow the company to become more cost competitive and will continue manufacturing solvent lube oils at refineries in Tulsa, OK and Yabucoa, Puerto Rico.

The **Armak Co.** changed its name to Akzo Chemie America. Included under this banner will be Armak Chemicals, Noury Chemicals, Ketjen Catalysts, Pioneer Chemicals and Interstab Chemicals.

The U.S. Food and Drug Administration ordered domestic manufacturers of rubber baby-bottle nipples not to exceed 60 parts per billion of nitrosamines in their products. The RMA said the makers should be able to comply.

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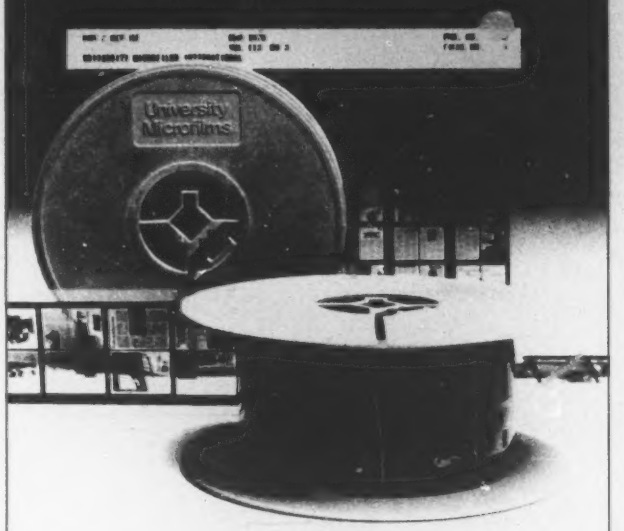

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***RW* survey shows**

Tech service — top priority to manufacturers

by Joseph Kuebler
business editor

Quality has been a major factor in the manufacturing process for many a day but it is a safe bet that never has the emphasis on trouble-free products been as pronounced as it is today.

One of the better examples of this can be found in the auto industry where the impressive showing of foreign-made vehicles has stimulated the consumer push for quality.

Consumers are not alone in this quest, however. Poor quality hits producers where it hurts the most — in the pocketbook, since warranty costs have become atrociously high, Richard C. Edwards, an automotive consultant, points out.

"Better quality also contributes to customer satisfaction which can lead to repeat sales," he adds.

The automobile companies have been stressing quality in the products supplied to them. Ford Motor's quality campaign has received widespread attention and suppliers have been quick to get the message that this is not just advertising hype.

"If they don't meet the specs they are not suppliers very long . . . it's that simple," Ed Francis of Ford's chassis engineering office said.

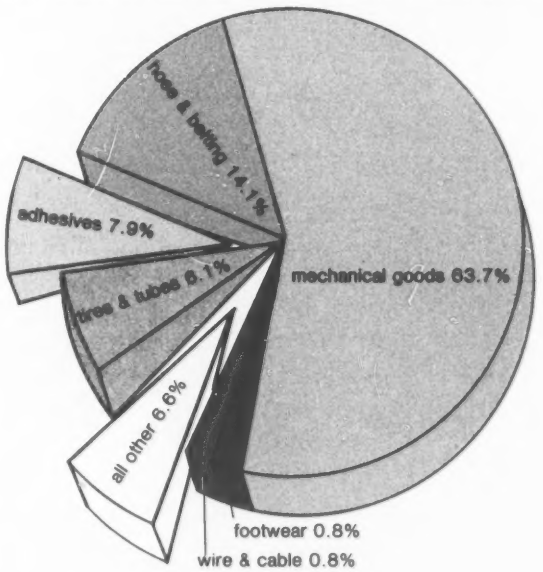
Reports from other car manufacturers carry a similar tune which can explain why rubber products manufacturers are more concerned with the quality of its products and are turning to its suppliers for assistance. A recent survey conducted by *RW* bears this out. It shows that manufacturers are leaning heavily on the suppliers with technical service capabilities. Nearly three out of every four manufacturers surveyed chose a supplier because of its tech service ability.

Included in the survey were 210 rubber product manufacturers, chosen at random. About 64% of those were primarily producers of mechanical rubber goods, hose and belting accounted for 14% of the products, adhesives 8% and tires and tubes 6%.

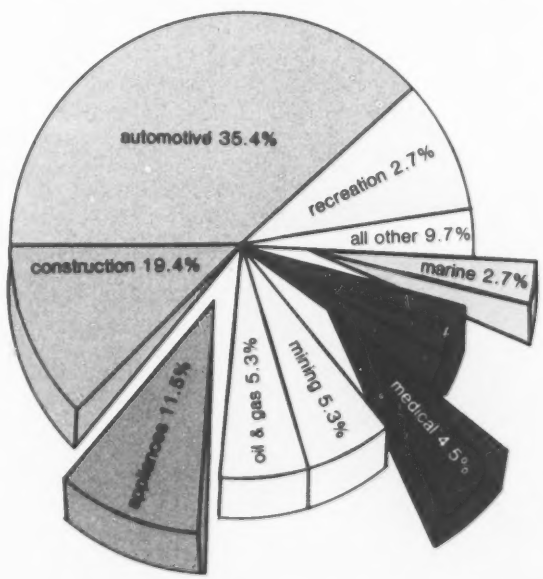
Automotive is still the largest market served with 35% of the respondents claiming it their principle market. Construction accounted for 19%, appliances 11%, oil and gas and mining each accounted for 5.3% followed by medical at 4.5% and agriculture 3.5%.

When a manufacturer chooses a supplier because of the tech service capabilities, he is seeking solutions to compounding problems more than anything else. 44% said this is the main capability they look for in a supplier. 25% said they are interested

Principle products of manufacturers surveyed



Main end markets served by manufacturers



in development testing and 18% in laboratory testing.

When it came to the question of how often manufacturers used the tech service facilities of their suppliers, nearly 42% replied often, 29.5% occasionally, and 28.7% seldom.

Among those who did use the services of their suppliers, an overwhelming majority, just under 95%, noted they were satisfied. Of the same number who were not pleased, the complaints almost invariably cited "slow response" by the supplier.

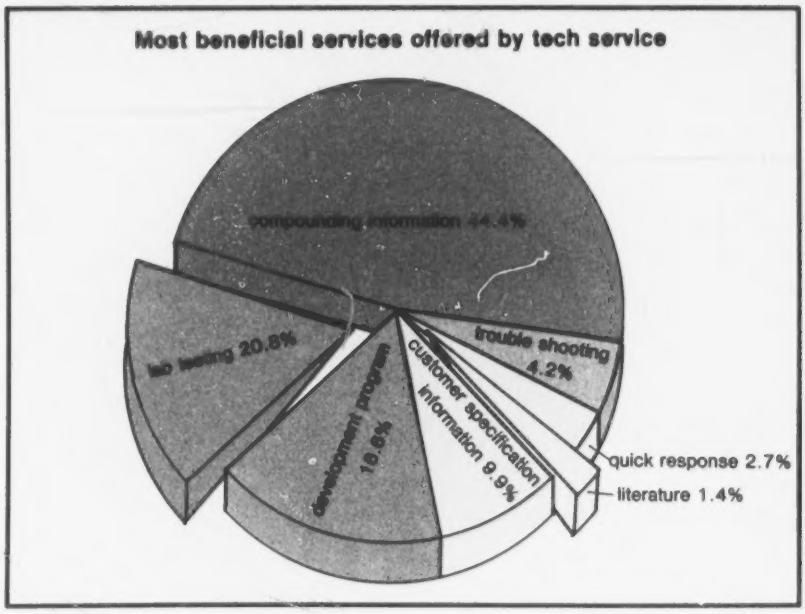
Some 44% of the manufacturers found compounding information as the most beneficial service provided by their suppliers; 20.8% said it was laboratory testing and 16.6% liked development programs.

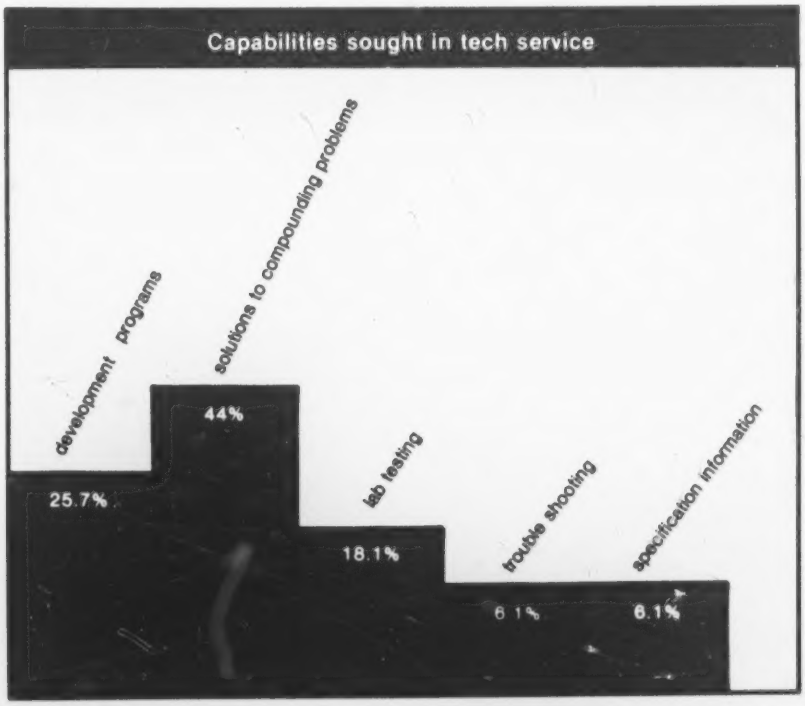
The question of what can suppliers do to improve their tech service capabilities brought a variety of suggestions but most included faster response; a call for expanded capabilities with more tech service people available; furnish information with greater detail, and have tech service people travel with sales people more often.

One eastern manufacturer recommended that suppliers stay close to their customers — "don't just be available if the need arises." He thinks this can be mutually beneficial.

Another expressed the thought that suppliers with their tech service capabilities should be more practical with their recommendations, "keeping in mind we are a production facility, not an experimental operation."

Some of the manufacturers expressed concern that suppliers were cutting back on their technical service and some said the quality of personnel has slipped. "Suppliers who use an 800 phone number for customer technical service and staff the operation with people who simply read from available literature are doing themselves a disservice," one said.





Suppliers

A separate survey of suppliers showed the great majority (76%) were convinced their tech service was becoming more and more important as part of their business.

They cited as reasons for this viewpoint: increasing customer demand; the fact that products are becoming more sophisticated; the increasing number of product lines; customer insistence on higher quality; the trend toward specialization, plus the fact that fewer of their customers have tech service facilities.

There were 75 respondents to the supplier survey spread out among product mix and geographical area.

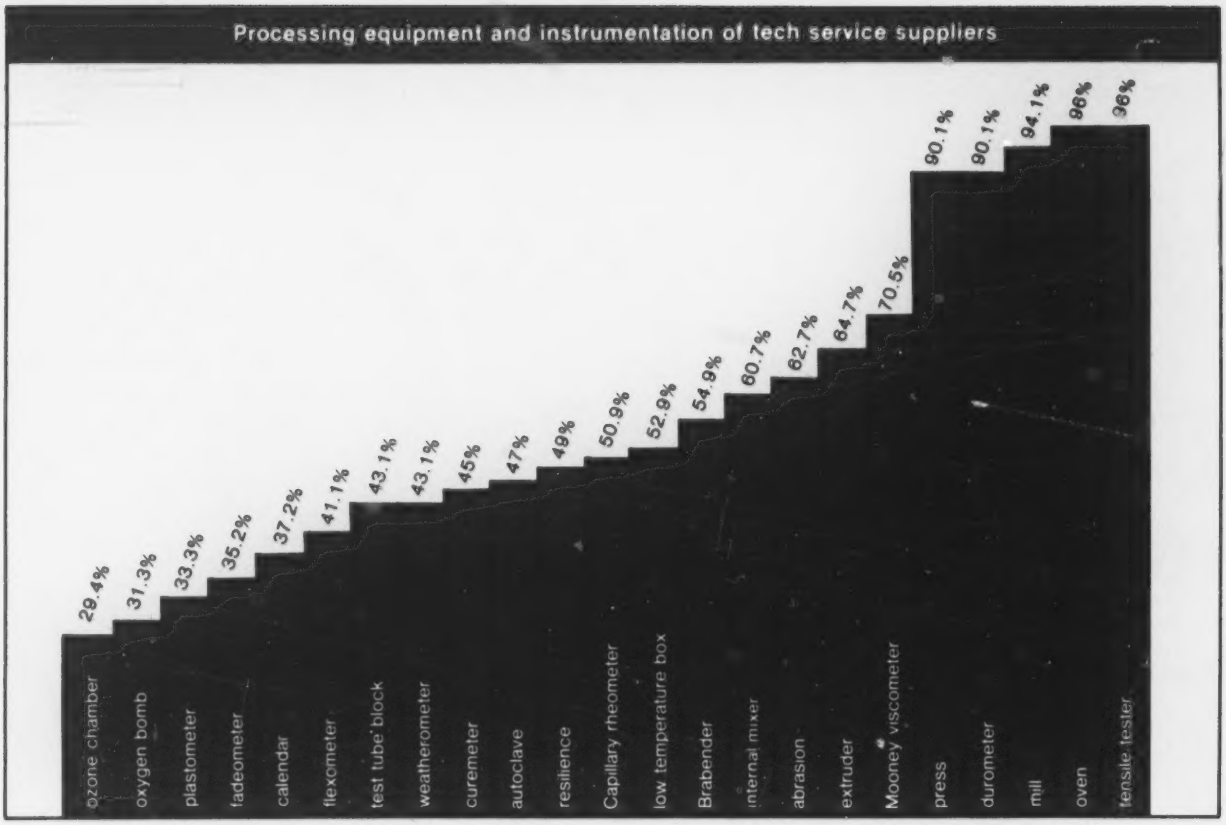
When it came to the question of whether their tech service is available to both customers and non-customers, just over half replied it was for customers only, while 49.2% said it was for both groups.

However, the big majority offer the service only to customers or strongly potential customers. Some have a rule of "customers free — non-customers pay."

Most suppliers (56.2%) reported that their tech service capabilities increased in the last five years; 37.6% said their's was the same, and 6.2% noted a decrease.

Looking ahead, 47% revealed they plan to increase their tech service facilities this year vs. 50.9% who plan no changes.

To achieve greater tech service capabilities in '84, more than half



(52%) disclosed they plan to purchase additional processing and instrumentation equipment.

The survey also revealed that 96% of all the respondents had tensile testers and ovens; 94% owned mills; 90% owned both presses and durometers; 70% Mooney viscometers; 64.7% extruders; and 62.7% abrasion equipment.

Only 8.8% had all 23 pieces of equipment listed in the survey; 32% had 12 to 22 pieces, and 60% from 1 to 11 pieces.

The number of people on tech service staffs of companies participating in the study varied from two to 25 with the average at 16.

Independent labs

Questionnaires sent to independent testing labs showed 66% experienced business increases in the last five years, 27% were about the same and only 6% reported business decreases. Increases incidentally averaged 56% vs. decreases that averaged 20%. 48 labs took part in the survey.

A little over 70% of the labs look for an improvement in business in '84 with 26% expecting volume to remain about the same.

Ovens were the most popular equipment or instrumentation owned by the labs with 67.7% operating such equipment. Then came tensile testers, 64.5%; durometers, 58%; abrasion, 51.6%; and low temperature box, 45%.

Only one respondent had all the listed equipment and instrumentation. The average respondent owned eight pieces of equipment.

When it came to the question of whether the labs had prototype production capabilities, only 36% said yes. Out of the 64% that do not have such equipment, virtually all (95.7%) replied that they do not plan to add such facilities.

Almost two out of three independent labs reported that they assist their customers in developing formulas. **RW**